

I CLAIM:

1. A cytology brush, sized for entry into a mammary duct of a human patient and comprising:
  - a bristle shank;
  - 5 a bristle structure on the shank and having bristles of sufficient stiffness to loosen cytology material lining the mammary duct without substantial traumatization of mammary duct tissue;
  - a brush handle; and
  - a coupling for releasably attaching the bristle shank to the brush
- 10 handle.
2. The cytology brush in accordance with claim 1, wherein the bristle shank has an atraumatic tip.
3. The cytology brush in accordance with claim 1, wherein the bristles are nylon bristles.
- 15 4. The cytology brush in accordance with claim 1, wherein the coupling is a threaded connection between the shank and the handle.
5. The cytology brush in accordance with claim 1, wherein the coupling is a friction connection between the shank and the handle.
6. The cytology brush in accordance with claim 5, wherein the
- 20 friction connection is a collar.
7. The cytology brush in accordance with claim 1, wherein the coupling is a claw carried by the brush handle and releasably engaging the bristle shank.
8. The cytology brush in accordance with claim 1, wherein the
- 25 coupling is a corkscrew in the handle and releasably engages the bristle shank.
9. The cytology brush in accordance with claim 1, further including an elongated housing for the brush handle and a biopsy site marker releasably carried by the cytology brush in the elongated housing.
10. The cytology brush of claim 9, wherein the biopsy site marker
- 30 is an outwardly biased coil releasably mounted to the bristle shank.
11. The cytology brush of claim 1, further including a detent for limiting axial travel of the brush handle within the elongated housing.

12. The cytology brush of claim 11, wherein the detent is removably secured to the brush handle.

13. The cytology brush of claim 11, wherein the brush handle is slidably mounted in the elongated housing and the detent is integral with the elongated housing.

14. The cytology brush of claim 11, wherein the brush handle is slidably mounted in the elongated housing and the detent is mounted to the elongated housing in a hinged relationship therewith.

15. A cytology brush, sized for entry into a mammary duct of a human patient and comprising:

a bristle shank;

a bristle structure on the shank and having bristles of sufficient stiffness to loosen cells lining the mammary duct without substantial traumatization of mammary duct tissue; and

a detachable brush handle operably associated with the bristle shank.

16. The cytology brush of claim 15, wherein the brush handle is connected to the bristle shank by a detachable coupling.

17. The cytology brush in accordance with claim 16, wherein the coupling is a threaded connection between the shank and the handle.

18. The cytology brush in accordance with claim 16, wherein the coupling is a friction connection between the shank and the handle.

19. The cytology brush in accordance with claim 16, wherein the friction connection is a collar.

20. The cytology brush in accordance with claim 16, wherein the coupling is a claw carried by the brush handle and releasably engaging the bristle shank.

21. A cytology brush, sized for entry into a mammary duct of a human patient and comprising:

a bristle shank;

a bristle structure on the shank with bristles of stiffness sufficient to loosen cytological material lining the mammary duct without substantial traumatization of mammary duct tissue;

a detachable brush handle for the bristle shank; and  
a dispensable, opaque marker carried by the cytology brush.

5       22.     The cytology brush in accordance with claim 21 and further  
provided with a detent operably associated with the bristle shank for preventing  
inadvertent release of the detachable brush handle.

      23.     The cytology brush in accordance with claim 21 wherein the  
detent is mounted to the detachable brush handle.

10       24.     The cytology brush in accordance with claim 21 wherein the  
brush handle is slidably received within a housing and the detent is situated on the  
housing for operable engagement with the brush handle.

      25.     The cytology brush in accordance with claim 24 wherein the  
detent is a pivotable arm on the housing.

      26.     The cytology brush in accordance with claim 24 wherein the  
marker is a titanium coil carried on the bristle shank.

15       27.     The cytology brush in accordance with claim 24 wherein the  
housing is a tubular housing.